

Central Water 2013 Newsletter



2012 Water Quality Report Inside

Distributed Spring/Summer 2013

- *Christy Leach Marani, President, Board of Directors*
- *Carol Hamilton Monkerud, Vice-president, Board of Directors*
- *John R. Benich, Member, Board of Directors*
- *Robert Postle, Member, Board of Directors*
- *Julie Messersmith, Member, Board of Directors*

Generations in the Central Water District Area

By 1937, the Iles family had made their home on 20 acres on Day Valley Road (pictured). The area was full of apricot and apple orchards and the neighbors were few and far between. At the time, the family had a business in San Francisco and after they purchased the property from Mr. Day (of Day Valley Road) they built a house out of material salvaged from homes that had been dismantled in San Francisco and trucked to Aptos. When his family first moved to the area the apple orchards were still being farmed using horse drawn rigs. John Iles marveled that the drivers used only verbal commands to guide the horses. The family home didn't have electricity until 1945. They dry farmed, raised most of their own food, and were very conservative with water. Well drilling in the area was not successful, John remembers that

a neighbor drilled for a well and at 200 ft. hit the remains of a redwood tree, so water was trucked to the home on Day Valley Road. As a teen John worked for Roy Day. He rode his bike to the Day apple orchard on

first day of that job, Mr. Day rolled the truck while training John to be a driver. As a young man John watched the steel water lines get installed in the early 1950s after the Central Water District was formed. At that time,



Valencia Road and spent his work time either assembling apple boxes or working on gopher control. By 1966, he had worked himself into the job of truck driver delivering apples to San Jose. He recalls that on the

water was charged at a flat rate of \$7.50/month regardless of the usage. John and his family still enjoy living on 15 acres on Day Valley Road where they farm apples, lavender, and raise miniature horses and goats.

From the President of the Board of Directors

In November 2012 Director John Benich was re-elected to the Board & Robert Postle was elected to serve on the Board of Directors. Director Doug Sharp retired in February 2013 which led to the appointment of long-time District resident Julie Messersmith. At the Board

meeting held in December 2012 I was elected President & Carol Hamilton Monkerud assumed the Vice-presidency of the Board. In the upcoming year the Board will continue to provide leadership & oversight for rebuilding aging infrastructure & investing in the Central

Water District system reliability. On behalf of my colleagues I want to convey that it is a privilege to serve the community as Central Water District Board members. We welcome your input & invite you to attend the monthly meetings.
Christy Leach Marani

Water Conservation

- THE CENTRAL WATER DISTRICT WATER CONSUMPTION USAGE DURING 2011-12 FISCAL YEAR WAS 158.5 MILLION GALLONS
- THE AVERAGE CALIFORNIAN USES ABOUT 192 GALLONS OF WATER PER DAY. FOR SINGLE FAMILY HOMES 50% OR MORE OF THE WATER USED DAILY MIGHT BE GOING TO LANDSCAPING. INDOORS TOILETS ALONE ACCOUNT FOR ABOUT 32% OF TYPICAL RESIDENTIAL WATER USE.

2012 Water Quality Report

All water produced and delivered by the Central Water District meets or exceeds standards for public drinking water established by the California Department of Public Health Services and the United States Environmental Protection Agency. This Water Quality Report provides information that explains Central Water District's water quality for the 2011 calendar year; the data is derived from the most recent testing completed in accordance with State and Federal regulations. This report represents only a fraction of the activity the District engages in to provide you, the consumer, a high level of confidence in the water you drink. Central Water District drinking water is tested extensively and results consistently show that regulated contaminants are either not detected or are present in amounts far below the limits permitted by state and federal drinking water standards. These tests monitor tap water for microbial organisms, minerals and organic substances that could cause disease or other adverse health effects. Testing is done for over 120 different contaminants including bacteria, metals, organic chemicals and pesticides. Only substances that are detected in the water are included in this report. **ATENCION RESIDENTES! Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

Terms Used in this Report

Definitions: In the following tables, you will find detailed information about the water that comes from your tap. Your water is regularly tested for many chemicals and other substances, as well as radioactivity. Only substances that were detected in the water are listed in the tables. This information is provided to help you understand the terms used in this Consumer Confidence Report. CWD drinking water is tested extensively, and consistently show that regulated contaminants are either not detected, or are present in amounts far below the limits permitted by state and federal drinking water standards. These tests monitor tap water for microbial organisms, minerals and organic substances that could cause disease or other adverse health effects.

Maximum Contaminant Level (MCL) The highest level of a contaminant that is allowed in drinking water.

Primary MCLs are set as close to the PHGs (or MCLGs) as is economically or technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG) The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) The level of a contaminant in drinking water below which there is no known or expected risk no health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL) The highest level of a disinfectant allowed in Drinking

water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminations.

Primary Drinking Water Standard (PDWS) MCLs and MRDLs for contaminants that affect health long with their monitoring and reporting requirements, and water treatment requirements
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow.

ACRONYMS

DLR - Detection Limit for purposes of Reporting
CL - Maximum Contaminate Level

CLG - Maximum Contaminate Level Goal

NA - Not Applicable

NC - Not Collected

ND - Not Detected

mg/L - Milligrams per Liter or parts per million).

(Equivalent to 1 second in 11 1/2 days)

NL - Notification Level

TU - Nephelometric Turbidity Units

pCi/L - Pico Curies per Liter

ppt - Parts per Trillion (1 second in 31,700 years)

TT - Treatment Technique

ug/L - Micrograms per Liter or parts per billion

(ppb) (Equivalent to 1 second in 31.7 years)

MONITORING & SAMPLING FREQUENCY

Distribution System	Bacteriological 3 X Month
	Trihalomethanes 3 yrs
	Color 3 X Month
	Odor 3 X Month
	Turbidity 3 X Month
Well	
Water	Bacteriological Quarterly
	Inorganic Chemicals Quarterly
	Color Monthly.
	Nitrates Quarterly
	Odor Quarterly
	Turbidity Quarterly
	VOCs Once every 3 yrs.
	SOCs Once every 3 yrs.
	Radionuclides Once every 3 yrs. to 9 yrs.

DRINKING WATER SOURCE ASSESSMENT

INFORMATION: Assessment of the drinking water sources was completed in 2009. A copy of the reports available at the District office.
400 Cox Road
Aptos
Ca, 95003

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants & potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wild.

Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.

Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.



The Central Water District has three production wells currently in service – Wells 4, 10 and 12 are in the Rob Roy Junction area, drawing from the Aromas Red Sands Aquifer.

THE DISTRICT WATER IS TESTED EVERY MONTH FOR THE PRESENCE OF BACTERIA, THE PH LEVELS COLOR AND TURBIDITY.

PH RANGE FOR 2012
7.1 –7.6

IF THE DISTRICT HAS OCCASION TO TAKE A WELL OUT OF SERVICE IT WILL NOT BE PLACED BACK IN SERVICE UNTIL ALL BACTERIOLOGICAL SAMPLES MEET STATE WATER QUALITY STANDARDS.

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Agriculture in the District is primarily focused on grapes and apples.

Nitrate The District has detected nitrates above 22 mg/L, but less than the MCL of 45 mg/L in three (3) of its 5 active wells. Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six (6) months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Nitrate levels may rise quickly for short periods of time because of rainfall or agriculture activity.

Fluoride The District has detected levels of fluoride below the MCL (2 ppm) in all 5 of its active wells (naturally occurring).

Lead and Copper Survey Samples Taken in 2010

Lead and Copper	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	10	0.0005	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10	0.47	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Sodium and Hardness

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	05/24/11	26	14-26	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	05/24/11	200	140-200	none	none	Generally magnesium and calcium, and is usually naturally occurring

Detection Of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Total Chromium (ppb)	5/24/11	(Highest) 14	ND-14	50	2.5	Erosion of natural deposits
Nitrate (ppm) Well 10	12/12/12	(Highest) 18	ND-18	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Gross Alpha (pCi/L)	08/02/05	0.56	0.31-0.80	15	NS	Erosion of natural deposits
Total Trihalomethanes & Haa5 (ppb)	08/13/10	3.4 to 8.4 ND-2.8	3.4 to 8.4 ND-2.8	80 60	NS	By product of drinking water chlorination
Fluoride (ppm)	5/24/11	0.10 to 0.15	0.10 to 0.15	2.0	1	Erosion of natural deposits
Sulfate (ppm)	5/24/11	31 to 65	31 to 65	500	500	Runoff /leaching from natural deposits

OTHER CONTAMINANTS THAT WERE INCLUDED IN

WATER TESTING AND WERE **NOT** DETECTED:

ARSENIC

ALUMINUM

BARIUM

COLIFORM BACTERIA

MERCURY

NICKEL

POTASSIUM

SELENIUM

SILVER

THALLIUM

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Iron and Manganese are naturally occurring in the Purisima Formation

The District is currently in the planning phase to build an Iron / Manganese Treatment Plant

Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Color (units)	2012	ND-40	ND-40	15	NA	Oxidized iron and manganese
Iron (ppb) Wells 3/5	10/9/12	1400* Wells 3/5	ND-1400*	300	NA	Leaching of natural deposits
Manganese (ppb) Wells 3/5	10/9/12	430* Wells 3/5	ND-450*	50	NA	Leaching of natural deposits
Odor-threshold (units)	2012	ND	ND	3 units	NA	Naturally occurring organic materials
Turbidity (units)	2012	1.1	.58-3.1	5 units	NA	Soil runoff
Total Dissolved Solids (TDS) (ppm)	05/24/12	340	230-320	1000	NA	Leaching of natural deposits

Detection of Other Monitoring Results

Chemical or Constituent	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Hexavalent Chromium (Cr6) (ppb)	5/24/11 5/24/12	Well 4 & 10 (11) Well 12 (3.7) Well 3 & 5 ND	ND-11	Public Health Goal .002 (ppb.)	Naturally occurring chromium bearing minerals
Magnesium (ppm)	5/24/11	23 to 28	22-28	NA	Leaching of natural deposits



If you have additional questions or concerns regarding the quality of your water, please contact —
Ralph Bracamonte, at 688-2767

Did you know that:

Sound travels almost 5 times faster underwater than in air?

About 70% of an adult's body is made up of water?

90% of an iceberg sits under water?

The average human brain contains around 78% water?

Sponges hold more cold water than hot water?

Frequently Asked Questions

Customers often ask “Who Regulates the Water Quality of the Central Water District?”

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) & the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/ Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline and that number is 1-800-426-4791.

District History Note

The District's first official Board meeting was on January 25, 1951 at the residence of Roy Day. The Board Of Directors then held their meetings at the Pleasant Valley School House until April 1952.

FACTS ABOUT THE DISTRICT :

- ESTABLISHED IN 1950
- 3 FULL TIME STAFF
- 1.2 MILLION GALLONS TANK CAPACITY
- 3 ACTIVE WELLS
- 3 STANDBY WELLS
- 6 BOOSTER PUMP LOCATIONS
- 23.2 MILE OF PIPES



The District presently serves 812 customers with domestic, fire, agricultural and commercial services. The size of the District is about five square miles. The photo to the left was taken in **1968** and depicts the Central Water District service area.

Note: Photo in last newsletter was from 1958.

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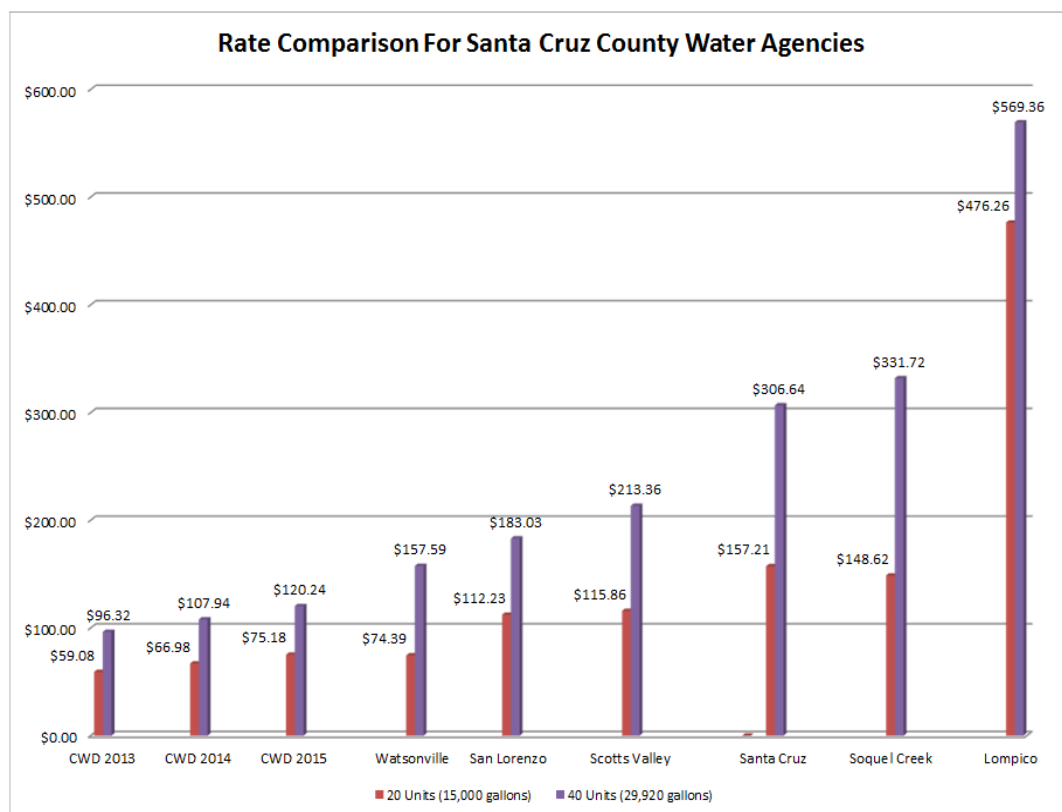
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This newsletter was written and produced by the Central Water District staff. For more information about any of the newsletter topics please contact the District office.

The Board of Directors of the Central Water District meet on the third Tuesday of each month at 7 pm. Board meetings are held at the District office, 400 Cox Road, and are open to the public.



The Central Water District staff designed and published a website and you can visit it at:
[HTTP://WWW.CENTRALWATERDISTRICT.US.COM](http://www.centralwaterdistrict.us.com)

The California Poppy (*Eschscholzia californica*) has been the state flower since 1903. It is drought-tolerant, self seeding, and easy to grow in gardens. It is best grown as an annual in full sun and sandy, well-drained soil. Horticulturalists have produced numerous cultivars with a range of colors, blossoms, and stem forms. These typically do not breed true on reseeding. Seeds are often sold as mixtures.



UPDATE: Prop. 84 Grant Funding

The Prop. 84 Grant funded planning and feasibility study regarding the redistribution of groundwater pumping between the Aromas and Purisima Aquifers is nearing completion. The team of HydroMetrics WRI and Kennedy/Jenks have worked on evaluating the sustainable yield of the Purisima Formation and the condition and capacity of the Cox Road wells; they have prepared a conceptual design for a water treatment plant that would be appropriate for meeting the

needs of the District regarding the treatment of iron and manganese and they will soon be finished with a groundwater management analysis. The final report should be ready this summer and that will provide the information necessary to determine any future steps for the District related to this project. The Board of Directors and Technical Advisory Committee have been an integral part of this study process. If you have any questions regarding the project please feel free to call Ralph or Christine at the office.